

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Cancelled)

11. (Currently amended) A method of making an optical fiber having a plurality of voids extending along the fiber axis, comprising the steps of:

preparing a preform having a plurality of voids whose cross-sectional areas are uniform along the preform axis, the preform having an initial area fraction of the plurality of voids that is a ratio of a total area of the plurality of voids to cross-sectional area; [[and]]

drawing the optical fiber from the preform with a fiber drawing furnace, ~~wherein the drawing step includes obtaining an~~ determining a resulting area fraction of the plurality of voids in the drawn optical fiber,

the drawing step comprising the sub steps of:

measuring the speed at which the preform is supplied, the speed at which the optical fiber is drawn, and the diameter of the optical fiber during the drawing; and

calculating the resulting area fraction of the plurality of voids in said drawn optical fiber from the value measured in the measuring step, a preform diameter, and the initial area fraction of the plurality of voids in the preform, wherein the preform diameter and the initial area fraction of the plurality of the voids in the preform are measured before the optical fiber drawing; and

performing feedback control of pressure in the plurality of voids, a furnace temperature and a time for fiber to pass duration of the fiber drawing in the furnace during the drawing, based on the ~~obtained resulting~~ area fraction.

12. (Cancelled)

13. (Cancelled)

14. (Previously Presented) A method of making an optical fiber according to claim 11, wherein the preparation step comprises the steps of:

preparing a base material having an axis in a single piece;

boring three or more voids of the plurality of voids in the base material along the base material axis; and

cleaning surfaces of the base material at said plurality of voids.

15. (Previously Presented) A method of making an optical fiber according to claim 14, wherein said boring step comprises the sub steps of:

inserting protruding portions of a boring appliance into said base material at a temperature above a glass softening point; and

pulling out the protruding portions from the base material immediately before or after lowering the temperature of said preform.

16. (Currently amended) A method of making an optical fiber which contains a plurality of regions made of a sub medium whose refractive index differs from that of a main medium constituting the optical fiber, comprising the steps of:

preparing a preform having a plurality of regions made of a sub medium having cross-sectional areas that are constant along the preform axis, the preform having an initial area fraction of the plurality of voids that is a ratio of a total area of the plurality of voids to cross-sectional area; and

drawing the optical fiber from said preform, the drawing step comprising the sub steps of:
measuring a speed at which the preform is supplied, a speed at which the optical fiber is drawn, and a diameter of the optical fiber during drawing, and

calculating the resulting area fraction of the plurality of regions made of a sub medium in said drawn optical fiber from the measured values, the preform diameter, and the initial area fraction of the plurality of regions made of a sub medium in the preform, wherein the preform diameter and the initial area fraction of the plurality of regions made of a sub medium in the preform are measured before the drawing step[.]; and

~~wherein the drawing step includes performing feedback control of~~ adjusting a heating condition in a manner in which at least a temperature of a drawing furnace for heating said preform or a time ~~length for duration of~~ the optical fiber ~~to pass in~~ the drawing furnace is varied based on the resulting area fraction.

17-19. (Cancelled)

20. (Previously Presented) A method of making an optical fiber according to claim 16, further comprising the preprocessing steps of:

making a preform in a single piece;

boring three or more voids in said preform along the preform axis; and

cleaning surfaces of the preform at said voids.

21. (Previously Presented) A method of making an optical fiber according to claim 20, wherein said boring step comprises the sub steps of:

inserting protruding portions of a boring appliance into said preform at a temperature above a glass softening point; and

pulling out the protruding portions from said preform immediately before or after lowering the temperature of said preform.

22. (Cancelled)

23. (Cancelled)

24. (Previously Presented-Withdrawn) A method of making an optical fiber having a plurality of voids, comprising the steps of:

closing the voids by heating and fusing an optical fiber selectively at a plurality of portions spaced apart along the fiber axis,

wherein the optical fiber is made by a method according to claim 11.

25. (Cancelled)